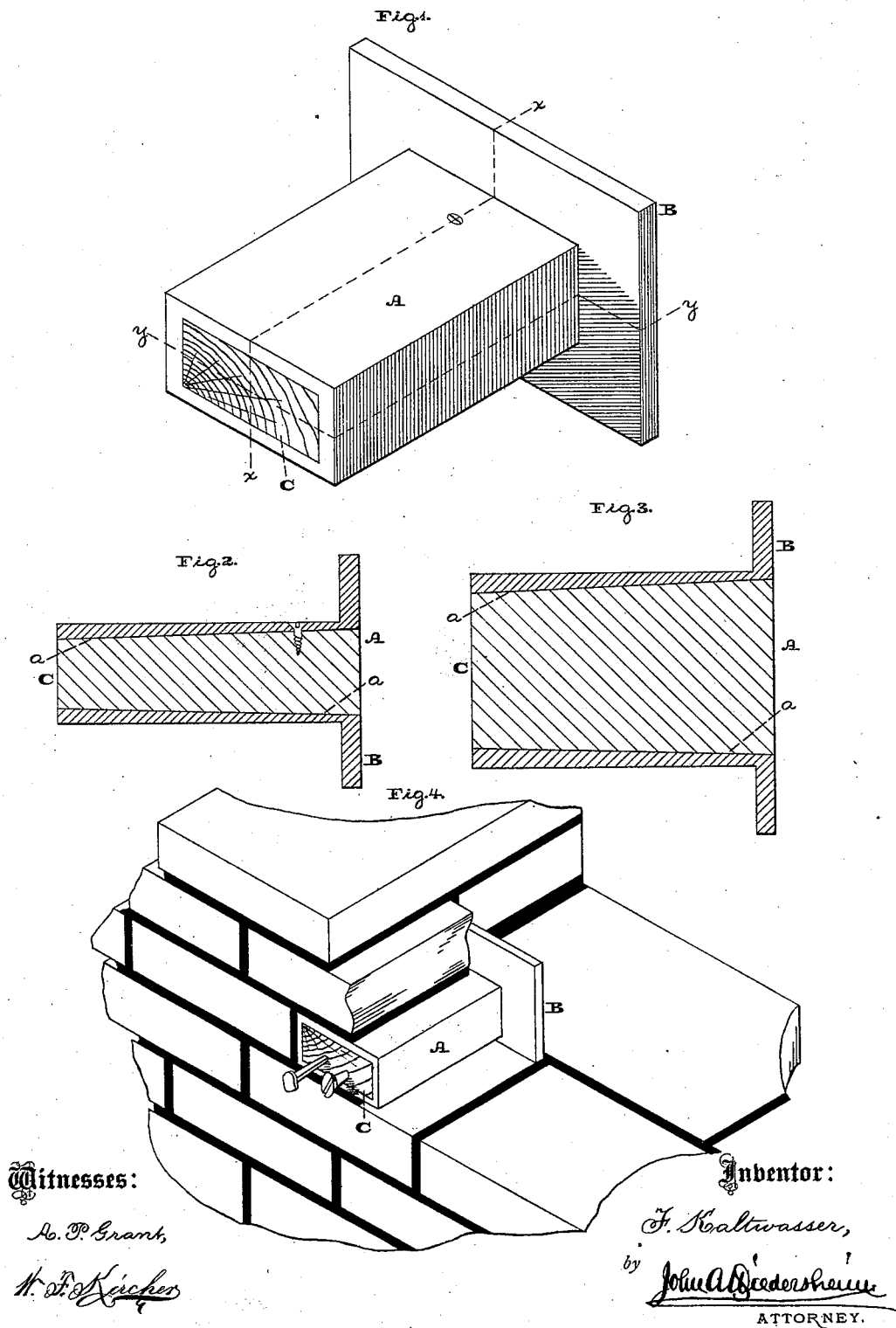


F. KALTWASSER.
Construction of Buildings.

No. 221,319.

Patented Nov. 4, 1879.



UNITED STATES PATENT OFFICE.

FREDERICK KALTWASSER, OF BELLEVILLE, ILLINOIS.

IMPROVEMENT IN THE CONSTRUCTION OF BUILDINGS.

Specification forming part of Letters Patent No. **221,319**, dated November 4, 1879; application filed June 28, 1879.

To all whom it may concern:

Be it known that I, FREDERICK KALTWASSER, of Belleville, in the county of St. Clair and State of Illinois, have invented a new and useful Improvement in Anchors for Securing Wood or other Work to Buildings, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of a building-box embodying my invention. Fig. 2 is a vertical section in line *x x*, Fig. 1. Fig. 3 is a horizontal section in line *y y*, Fig. 1. Fig. 4 is a perspective view, showing the application of my invention.

Similar letters of reference indicate corresponding parts in the several figures.

Various modes have been practiced for obtaining holds for the nails, screws, &c., which fasten wood-work and other materials to brick and masonry walls generally; but, as is well known, they do not afford security for the fastenings, and the walls are weakened by their use.

My invention consists of a flanged box, which is internally wedge-shaped, and adapted to be laid in the wall and receive a tapering plug, whose hold is increased when there is outward strain thereon, one end of said plug necessarily appearing at the narrow end of the box and affording hold for the nails or screws of the wood-work, &c., to be secured, the nails or screws expanding and tightening the plug against the box.

Referring to the drawings, A represents a metallic box or tubular structure, open at both ends, and having at one end a flange, B.

The sides of the inner face of the box are tapering or wedging, as at *a a*, the widest portion being at the flanged end, and into the box is driven a tapering wooden plug, C, whose ends are flush with the ends of the box.

The box is laid in position between the bricks

or stones, the flange B being within and abutting against the inner joint of the masonry, and the end of the plug C opposite to the flange being exposed on the outer wall of the building.

It is evident that the box requires to be located wherever nails or screws are to be driven for securing wood or iron work, &c., and as the nails or screws are forced into the plug they cause it to tighten to a greater extent against the walls *a* of the box.

Should there be outward strain on the wood-work, &c., the outward displacement of the plug is prevented by the wedging and consequently tightening contact of said plug and box, and as the screws or nails are held firm in the plug, and their security is insured, and the box is rendered immovable outwardly by the flange B, the separation of the wood-work, &c., from its place of attachment is prevented, the attachment being found to be reliable and durable.

A screw or nail may be passed through the box into the plug for the purpose of retaining the latter in place during the time of building, and assist in holding it under ordinary circumstances.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

An anchor consisting of a metallic box or case open at both ends, and provided with a conical or tapering plug fitted in a correspondingly-shaped recess therein, the smaller end of which plug is exposed at one end of the box, the other end of the box being provided with a flange, substantially as and for the purpose set forth.

FREDERICK KALTWASSER.

Witnesses:

PETER DOLLUS,
ADOLPH HANSING.